OIPE JC131
FEB 14 2005
PATENT & TRADEMARK OFFICE

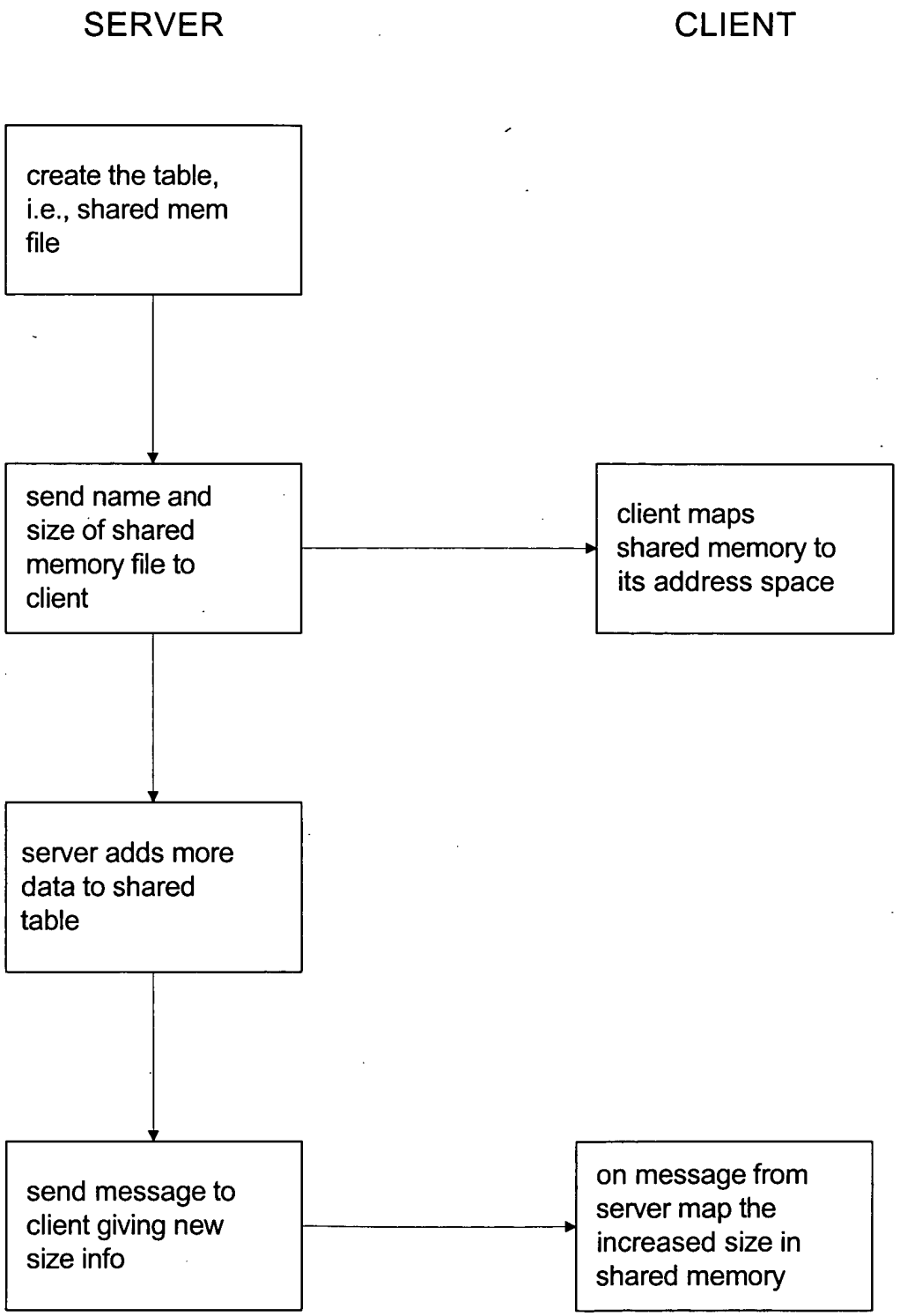

Fig. 1 PRIOR ART

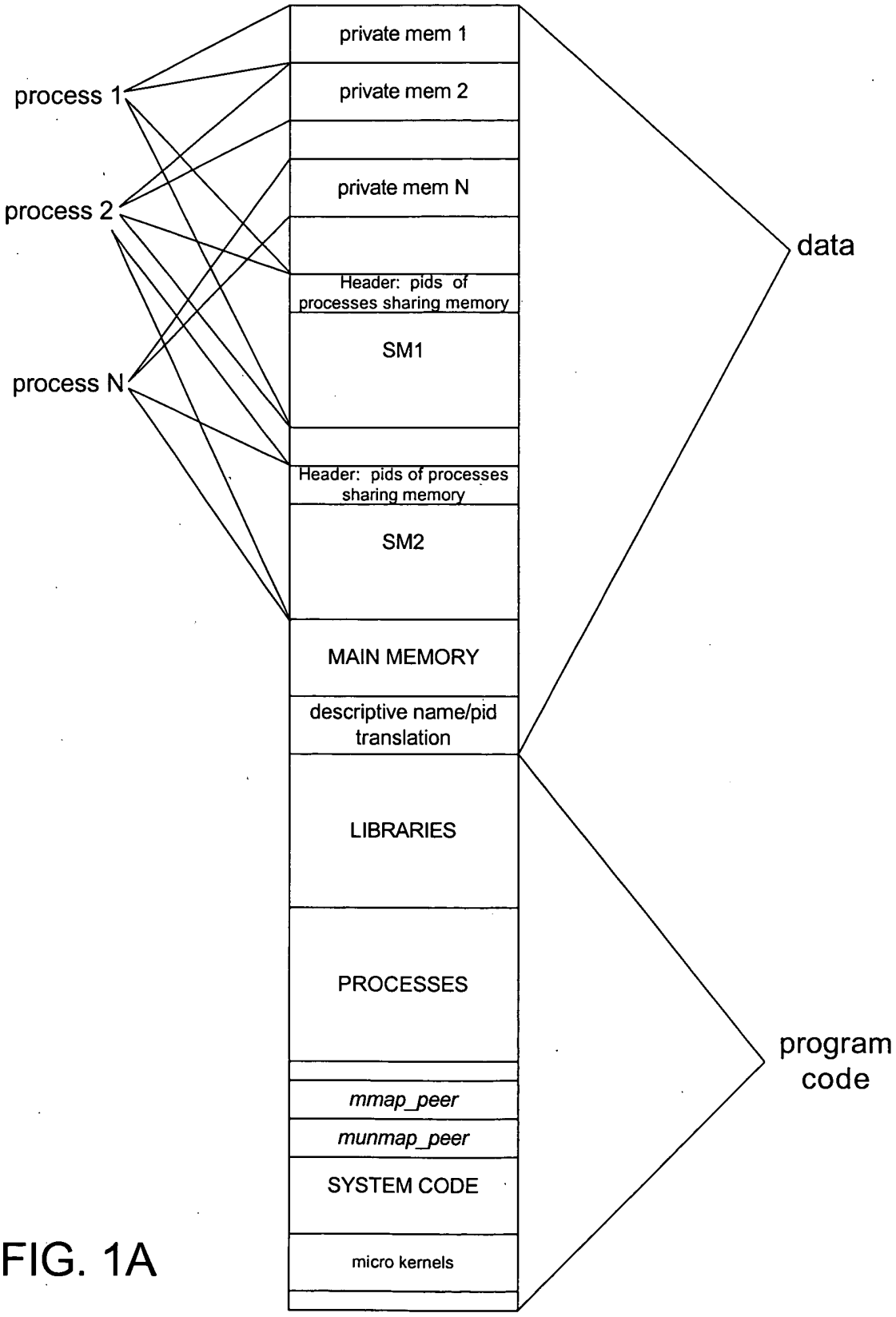
process 1
process 2
process N
private mem 1
private mem 2
private mem N
Header: pids of processes sharing memory
SM1
Header: pids of processes sharing memory
SM2
MAIN MEMORY
descriptive name/pid translation
LIBRARIES
PROCESSES
mmap_peer
munmap_peer
SYSTEM CODE
micro kernels
data
program code

FIG. 1A

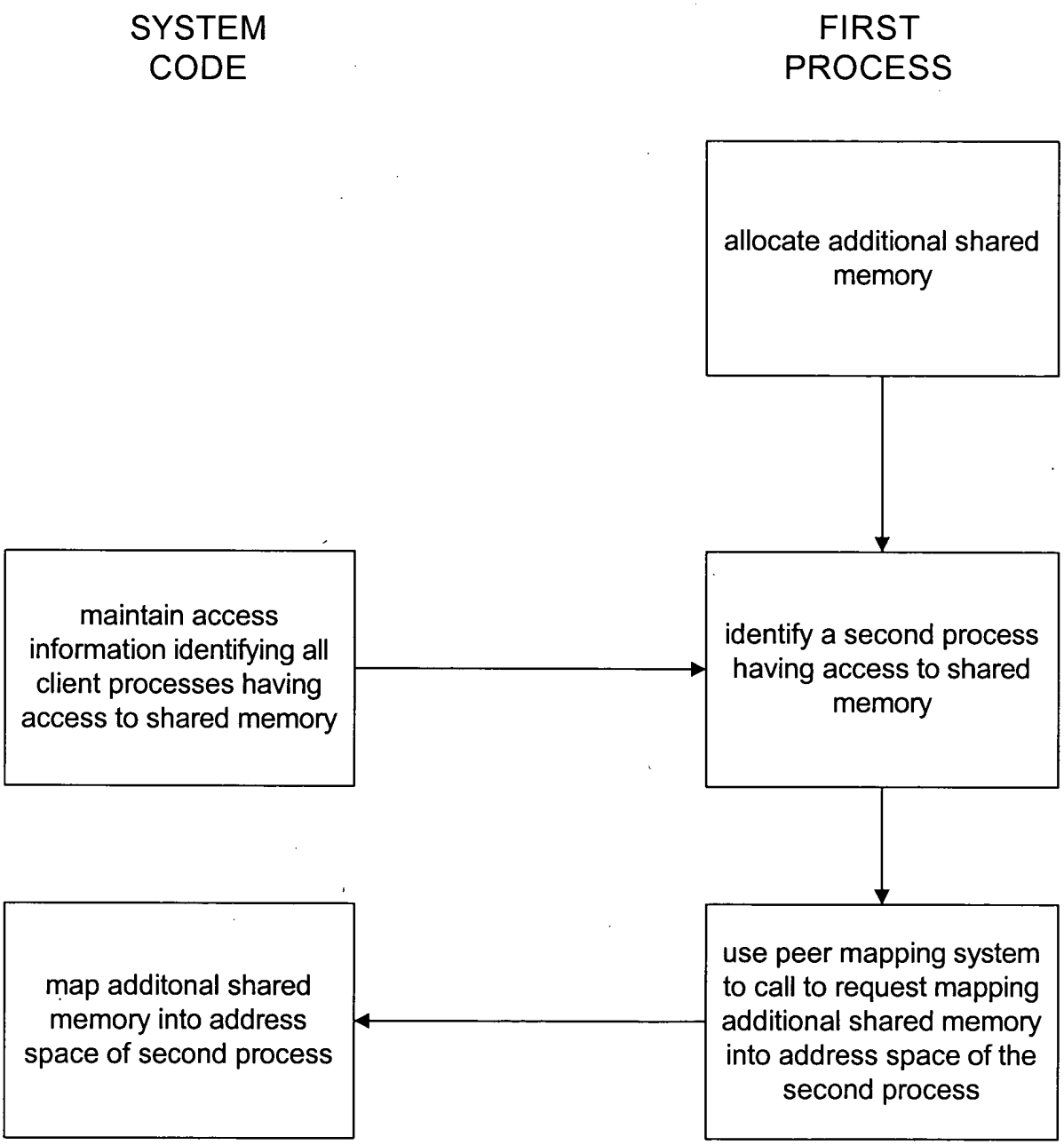
SYSTEM CODE
FIRST PROCESS
allocate additional shared memory
identify a second process having access to shared memory
use peer mapping system to call to request mapping additional shared memory into address space of the second process
map additonal shared memory into address space of second process
maintain access information identifying all client processes having access to shared memory

FIG. 2

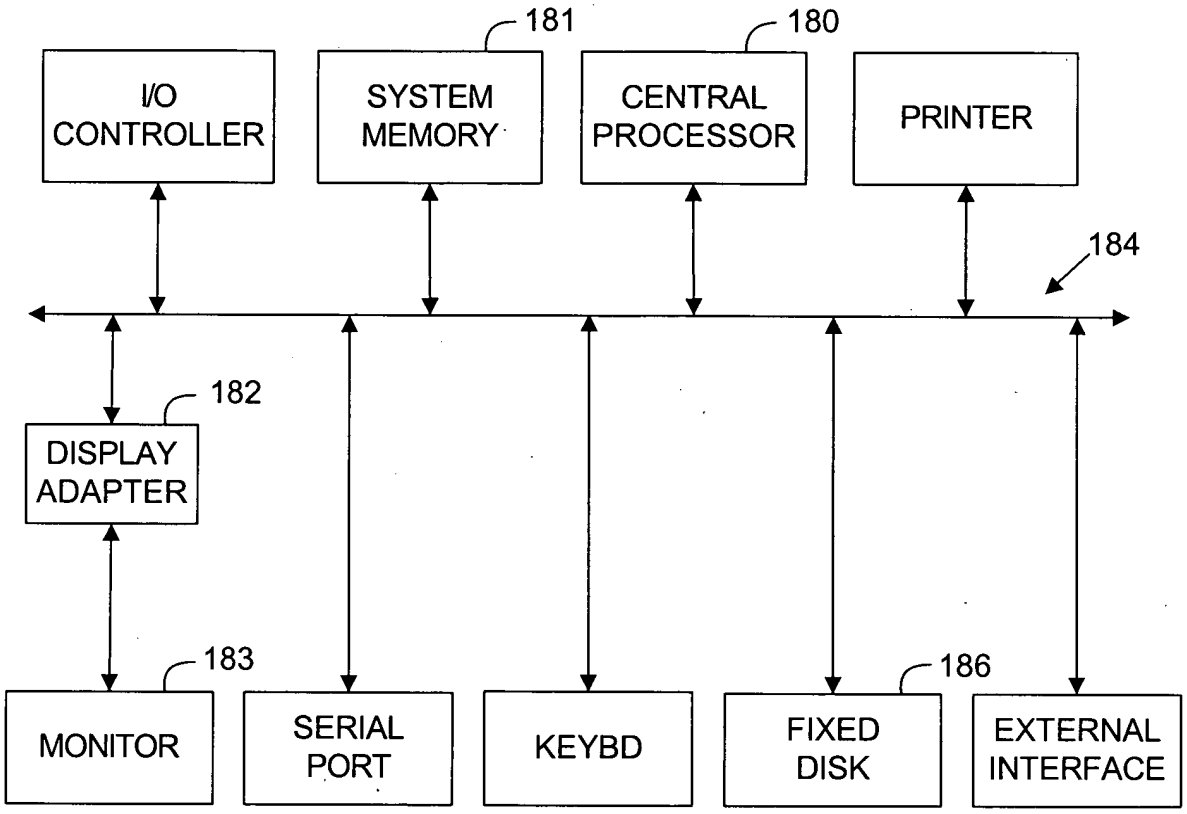
181
180
I/O CONTROLLER
SYSTEM MEMORY
CENTRAL PROCESSOR
PRINTER
184
182
DISPLAY ADAPTER
183
186
MONITOR
SERIAL PORT
KEYBD
FIXED DISK
EXTERNAL INTERFACE

Fig. 3